

LAFCO of Napa County

Local Agency Formation Commission

1804 Soscol Ave, Suite #205A
Napa, CA 94559-1346
(707) 259-8645
FAX (707) 251-1053
<http://napa.lafco.ca.gov>

AGENDA ITEM NO. 8c

August 14, 2003

TO: Local Agency Formation Commission

FROM: Keene Simonds, Analyst

SUBJECT: Comprehensive Water Service Study: *Draft Determinations*

At its April 10, 2003 meeting, the Commission received a presentation by staff providing an overview of the first phase of the *Comprehensive Water Service Study*. Following this presentation, the study was released for public review and a public workshop was conducted by the Commission at its June 12, 2003 meeting. At the conclusion of the public workshop, the Commission directed staff to proceed with the next phase of the study: the development of draft determinations.

Accordingly, staff has prepared draft determinations with respect to the Cities of American Canyon and Calistoga, Town of Yountville, and the Napa Sanitation District. These draft determinations are included with updated study sections for each affected agency and are presented to the Commission for its consideration pursuant to Government Code §56430. Staff is presenting these draft determinations to the Commission for a first-reading. These draft determinations will then be circulated for comment from affected agencies and interested parties. Final determinations will be presented for adoption at the Commission's October 9, 2003 meeting.

Draft determinations for the remaining agencies included in the *Comprehensive Water Service Study* will be presented to the Commission at its October and December meetings.

Harry Martin, Chair
Councilmember, City of Napa

Ken Slavens, Commissioner
Mayor, City of St. Helena

Lori Luporini, Alt. Commissioner
Vice-Mayor, City of American Canyon

Mike Rippey Vice-Chair
Supervisor, 5th District

Brad Wagenknecht, Commissioner
Supervisor, 1st District

Bill Dodd, Alt. Commissioner
Supervisor, 4th District

Guy Kay, Commissioner
Representative of the General Public

Volker Eisele, Alt. Commissioner
Representative of the General Public

Daniel Schwarz
Executive Officer

TOWN OF YOUNTVILLE

OVERVIEW

In 1831, George C. Yount, a frontiersman from North Carolina, arrived in the Napa Valley and became one of the first United States citizens to settle in the Mexican held territory. In 1855, Yount hired a land surveyor to plan and develop a small residential community catering to farmers and ranchers. Originally known as “Sebastopol,” the community was renamed Yountville following Yount’s death in 1875. The development of the community of Yountville was prompted and sustained by the success of agriculture (orchards) as well as the extension of the Napa Valley Railroad Company. The arrival of the railroad marked a new period of growth and prosperity in the Napa Valley. This period also coincided with the arrival of migrants from Europe, leading to the emergence of viticulture as the region’s primary commerce.

In 1884, the federal government constructed a long-term care facility for elderly and disabled military veterans at the western edge of town (facility was turned over to the State of California in 1897). To provide water service to the facility, the “Veterans Home” developed a small on-site reservoir consisting of diverted water drawn from nearby Dry Creek. By the 1940s, however, system demands for the Veterans Home necessitated a larger and more reliable water source. In 1946, the California Department of Public Works, Water Resources Division completed construction on Rector Dam, allowing the Veterans Home to begin diverting and storing water from Rector Creek, a tributary of the Napa River.

Concurrently, steady growth within the remaining portions of the community of Yountville necessitated the development of a public water system; groundwater had been the primary water source available to locals. In 1950, the Yountville County Water District (YCWD) was formed and subsequently issued general obligation bonds to construct the community’s first public water system. To supply and operate the system, YCWD reached agreement with the City of Napa. This agreement allowed the District to connect to Napa’s Conn Line (Lake Hennessey) and for Napa to assume operation and maintenance of the District’s water distribution system.

In 1965, the community incorporated as the City of Yountville, which included the merger of YCWD and the Yountville Sanitation District.¹ In 1966, Yountville adopted its first general plan. The 1966 General Plan included land-use policies designed to transition Yountville from an agricultural community to small town consisting of neighborhoods and assorted commercial developments. As part of its planning component, the general plan anticipated a resident population of 30,000 by 1985.

¹ Yountville’s incorporation included the merger of the Yountville Sanitation District (previous sewage collection and treatment provider for area).

In 1967, Yountville entered into a water supply agreement with the State of California Department of Veterans Affairs for an annual entitlement of water drawn from Rector Reservoir. The original agreement provided the Town with the right to purchase up to 240 acre-feet of potable water, with deliveries commencing through an interconnection with the State's distribution system near the intersection of Yountville Cross Road and Silverado Trail. The agreement was extended through 1977 and was replaced with a second agreement increasing the Town's annual entitlement to 325 acre-feet.²

By the early 1970s, a rejuvenated interest in wine making facilitated a surge in growth throughout the Napa Valley. In 1973, alarmed by a sudden increase in development, Yountville conducted a series of public workshops to revise land-use policies consistent with public interest. As a result, the Town adopted a new general plan in 1975 limiting development within existing town boundaries while maintaining its small town character. The revised general plan anticipated that the Town's resident population would not exceed 3,420 by 2000.

In 1982, to supplement water supplies drawn from Rector Reservoir, Yountville entered into a water supply agreement with the Napa County Flood Control and Water Conservation District (NCFCWCD). The original agreement provided the Town with an annual entitlement of water drawn from the State Water Project (SWP) through 2035 with gradual increases until reaching a maximum annual entitlement of 500 acre-feet by 1990. The agreement was amended later that year as part of a statewide program by the Department of Water Resources to encourage SWP contractors to implement water conservation programs. The amendment increased the Town's short-term entitlement while regressing Yountville's maximum annual entitlement to 1998. The amended agreement requires the Town to have a water conservation plan with the specific goal of conserving 30 acre-feet of annual SWP water by 2010.

To facilitate access to its newfound water supply, Yountville reached agreement with the City of Napa to treat and convey its SWP entitlement through an interconnection between the two municipalities' distribution systems. In exchange, Napa is reimbursed for the capital costs associated with the construction, operation, and maintenance of the Jameson Canyon Water Treatment Plant on a proportionate level to the amount of Yountville's maximum annual entitlement. Napa is also reimbursed for the delivery costs associated with the construction, operation, and maintenance of its distribution systems (Conn and Jameson Lines). Significantly, since Napa's water sources are commingled, Yountville's SWP entitlement is essentially turned over to Napa in exchange for an equal amount of potable water from one of Napa's three sources: SWP, Lake Hennessey, and Milliken Reservoir. Yountville's distribution system is connected to Napa's 36-inch Conn Line at three separate delivery points off of State Highway 29.

² Since 1998, Yountville has operated under the provisions of one-year contract extensions with the State of California, Department of Veterans Affairs, for entitlement to Rector Reservoir. Negotiations for a long-term water supply agreement are pending the outcome of a state study identifying project water demands for the Veterans Home, Department of Fish and Game, Napa State Hospital, as well as environmental requirements.

By the 1990s, increased system demands from development projects coupled with lingering effects from the 1987-1992 drought had severely taxed Yountville's available water supply. In April 1998, to abate water outages, Yountville's Town Council adopted Ordinance No. 280-98, declaring a water shortage emergency and prohibiting new water connections as well as the expansion of existing water connections. Following several extensions, the Town Council adopted Ordinance No. 300-00, specifying restrictions of new water connections to single-family and duplex (two units) residences on existing lots of record. The ordinance mandates that expansions or conversions of existing non-residential uses require a review process prior to approval. This review process requires an applicant to submit a development application with the Town describing the proposed alteration to the existing water connection. Upon receipt of the application, the Town uses historical information to determine the anticipated water demand for proposed project. In order to be approved, the proposed expansion or conversion cannot increase the Town's existing water demand.³

At the end of 1998, Yountville issued its first water supply plan. The study was conducted by an outside consultant and calculated the Town's existing and projected water demands based on current and planned land uses. Assuming that a future agreement with the Veterans Home would secure an annual entitlement of 500 acre-feet, the study concluded the Town had an existing water deficit under below normal and dry year conditions of 113 acre-feet and 224 acre-feet respectively. Moreover, these deficits would increase under maximum buildout to 238 acre-feet and 334 acre-feet as identified in the Town's 1992 General Plan. In addition, the study noted that the Town's yield estimates for Rector Reservoir did not take into account potential loss of storage capacity due to sedimentation or the possibility of the Department of Fish and Game requiring water.

In 2000, to further alleviate system demands and mitigate water deficits, Yountville increased its SWP entitlement following its participation in a water transfer agreement between NCFCWCD and the Kern County Water Agency (KCWA). Negotiated on behalf of the five cities in Napa County, the water transfer agreement provided the terms and conditions for NCFCWCD to permanently purchase 4,025 acre-feet of annual SWP entitlement from KCWA. Costs are proportionally shared by each city in proportion to the amount of water allocated. Yountville's share of the Kern County transfer is 600 acre-feet.

Following the Kern County water transfer, Yountville reached a water transfer agreement with the City of American Canyon. The agreement (once effective) permanently transfers 250 acre-feet of American Canyon's SWP entitlement to Yountville. In exchange, Yountville agreed to assume all responsibilities of entitlement and compensate American Canyon \$275,000. Yountville also agreed to reimburse Vallejo \$57,000 for the construction of facilities connecting American Canyon's distribution system to Vallejo's distribution system. This interconnection provides American Canyon the ability to purchase water from Vallejo under the terms and conditions of an earlier agreement made between those agencies. Finally, Yountville agreed to relinquish to American Canyon its rights to any

³ Criteria requirements detailed in Town Resolution No. 1755-00.

additional capacity made to the North Bay Aqueduct (NBA). However, this agreement does not become effective until specified conditions are satisfied, including the certification of adequate CEQA documents. To this end, an interim agreement was reached allowing Yountville to annually receive 250 acre-feet water transfer until the permanent agreement becomes effective. As of March 2003, Yountville has not required the use of the interim agreement, but remains available for drought protection.

In 2001, Yountville reached an interim agreement with the State of California's Department of Veterans Affairs for the continuation of potable water deliveries drawn from Rector Reservoir. The interim agreement provides the Town with 325 acre-feet of potable water (treated by the State at the Rector Water Treatment Plant) through 2003. The interim agreement also permits the Town to purchase additional water exceeding 325 acre-feet under the same payment conditions when surplus water is available.⁴ However, the Town's entitlement rights to Rector Reservoir are surpassed by the water rights of the Veterans Home, Department of Fish and Game, and the Department of Mental Health (Napa State Hospital). Accordingly, the Town is beholden to the availability of surplus water after the Department of Veterans Affairs meets the needs of the aforementioned state entities. In the interim, the Department of Veterans Affairs has agreed to study the feasibility of entering into a long-term water supply contract with Yountville.

In 2002, Yountville's Town Council adopted a five-year capital improvement program that included several projects aimed at improving the Town's water system. In sum, the five-year capital improvement program identified seven water system projects at an estimated cost of \$1,384,000. In addition to several water line and lateral replacement projects, the Town has budgeted \$1,000,000 in capital improvement funds to improve its water supply. These projects include improving pipeline capacity and treatment plant upgrades to the City of Napa's water system as well as constructing treated water storage facilities. To finance the proposed improvements, the Town Council adopted a 5% increase in water rates as of January 2003.

In addition to providing potable water service, Yountville operates a reclaimed water service program. Initiated in 1979, the intent of the Town's reclamation program is to reduce storage requirements for treated wastewater when discharge to the Napa River is prohibited by the San Francisco Bay Regional Water Quality Control Board. Discharge is currently prohibited between May and October. The Town provides advanced secondary treated reclaimed water for irrigation and landscaping uses to four customers: Chimney Rock Golf Course, Vinter Golf Course, Clos Du Val, and Stags Leap. In 2002-2003, the Town produced and delivered approximately 65 million gallons (200 acre-feet) of reclaimed water. Usage charges are applied to reclaimed water customers to help cover the cost of reclamation facilities at the Yountville/Veterans Home Wastewater Treatment Facility. Current charges for reclaimed water are approximately \$73 per acre-

⁴ As part of the water supply agreement with the Department of Veterans Affairs, Yountville is required to only pay for the actual amount of potable water delivered. The monthly payment is based on each acre-foot delivered and is calculated to sufficiently cover the annual costs associated with the operation and maintenance of Rector Reservoir and the Rector Water Treatment Facility.

foot. The Town does not anticipate increasing the level of reclaimed treatment to tertiary (unrestricted) due to the prohibitive costs associated with current reclamation services.

GOVERNANCE

Yountville was incorporated in 1965 as a general-law city. The Town's governing body is comprised of a four-member town council and a directly elected mayor. Elections are conducted by general vote; the mayor serves a two-year term while the four town councilmembers serve staggered four-year terms. A town administrator is appointed to oversee and implement policies on behalf of Yountville's governing body and to administer the Town's five departments: community services, finance, planning, public works, and wastewater treatment. In 1992, Yountville's Town Council adopted a general plan that outlines land use and development policies. The Town is currently in the process of updating the 1992 General Plan. Yountville's Town Council meetings are conducted on the first and third Tuesdays of each month at the Town Hall Council Chambers. Meetings are open to the public.

OPERATIONS

Yountville's water system is maintained and operated by the Town's Public Works Department. The Town does not have a public works director; Yountville's Town Administrator appoints a public works supervisor to oversee and manage the water system. Designated staff is on call 24 hours a day, 7 days a week, to respond to any reported emergencies. As of March 2003, the Town's water system operations consisted of two designated public works' employees.

ADOPTED BOUNDARIES

Yountville's incorporated boundary is comprised of one contiguous area consisting of 934 acres. Yountville's adopted sphere of influence is conterminous with its incorporated boundary. Although the Town no longer permits outside connections, its water service area extends outside its incorporated boundary to include several properties located near the intersection of Yountville Cross Road and Silverado Trail. Land use designations for Yountville are defined in the Town's General Plan.

Yountville – Adopted Boundaries	
Incorporated Boundary:	934 acres *
Sphere of Influence Boundary:	934 acres *

- * Figures are approximations calculated using information generated by LAFCO and Napa County's geographic information systems.

WATER SUPPLY

Yountville's water supply is drawn from two sources: SWP and Rector Reservoir. Historically, the Town's primary water source is drawn from Rector Reservoir, which is operated and managed by the State of California's Veterans Home in Yountville. The water supply is secured through an agreement with the State of California's Department of Veterans Affairs, which administers operations at Rector Reservoir as well as the Rector Water Treatment Plant⁵. Water provided by Rector Reservoir is generated from Rector Creek, a tributary of the Napa River. The reservoir was formed following the construction of Rector Dam in 1946 and was subsequently raised in 1985, resulting in a total storage capacity of 4,600 acre-feet. The Town's 1998 Water Supply Plan states that the Veterans Home's water rights to Rector Creek are secured through a license with the State Water Resources Control Board, Division of Water Rights. This license authorizes the Veterans Home to divert and store up to 1,937 acre-feet of water annually from Rector Creek for beneficial uses. The Town's entitlement rights to Rector Reservoir, however, are surpassed by the water rights of the Veterans Home, Department of Fish and Game, and the Department of Mental Health (Napa State Hospital). In 2001, Yountville entered into a one-year interim water supply agreement with the Department of Veterans Affairs for 325 acre-feet of potable water generated from Rector Reservoir and treated at the Rector Water Treatment Plant. Extended through 2003, the interim agreement enables the Town to continue to purchase additional water if surpluses exist.⁶

Yountville's water supply drawn from the SWP is secured through a 1982 water supply agreement with NCFCWCD. The original agreement provided the Town with an annual entitlement of SWP water through 2035 and established a maximum annual entitlement of 500 acre-feet. However, the Town's SWP entitlement was augmented in 2000 following a water transfer agreement between NCFCWCD and Kern County Water Agency (KCWA). Negotiated on behalf of the five cities in Napa County, the agreement specified the terms and conditions for NCFCWCD to permanently purchase 4,025 acre-feet of annual SWP entitlement from KCWA. Yountville's share of the Kern County water transfer is 600 acre-feet. As a result, the Town's cumulative maximum annual entitlement of SWP water is currently 1,100 acre-feet.

Yountville also maintains an interim agreement with the City of American Canyon for the annual transfer of 250 acre-feet of American Canyon's SWP entitlement. Executed in 2000, the interim agreement is in lieu of an earlier agreement made between both agencies. This earlier agreement provides for the permanent transfer of 250 acre-feet of American Canyon's SWP entitlement to Yountville. The agreement, however, does not become effective until specified conditions are satisfied, including the certification of adequate CEQA documents. As of March 2003, Yountville has not required the use of the interim agreement, but remains available for drought protection.

⁵ The Rector Water Treatment Plant was recently upgraded and has a daily treatment capacity of 4.5 million gallons. The plant responds to storage levels in a nearby 1.0 million gallon treated water storage tank.

⁶ In 2001-2002, Yountville purchased 418 acre-feet from the Veterans Home.

As in the case for the City of Calistoga, an important component in defining the source of Yountville's water supply involves the Town's 1982 agreement with the City of Napa to treat and convey its SWP entitlement. As part of the agreement, Yountville reimburses Napa for the costs associated with the treatment and conveyance of its SWP water in proportion to the amount of water delivered. Since Napa's distribution system is comprised of three commingled water sources, Yountville's SWP entitlement is essentially turned over to Napa in exchange for an equivalent amount of water drawn from one of Napa's three sources: SWP, Lake Hennessey, and Milliken Reservoir. SWP deliveries to Yountville commenced in 1988.

As noted, Yountville has historically relied on water drawn from Rector Reservoir to meet the majority of its system demands. However, due to a recent spill at Rector Reservoir, water supplied by Rector has transmitted sand into the Town's distribution system. In addition, water drawn from Rector Reservoir is susceptible to high levels of turbidity stemming from watershed erosion causing the water treatment plant to periodically shut down.⁷

Yountville – Available Water Supply (acre-feet)		
Year	Rector Reservoir *	State Water Project **
2003	325	1,100
2004	325	1,100
2005	325	1,100
2006	325	1,100
2007	325	1,100
2008	325	1,100

* Yountville's interim water supply agreement with the California Department of Veterans Affairs is due to expire on October 1, 2003. It is anticipated that an extension agreement will be reached prior to the aforementioned expiration date, providing at minimum the current level of entitlement.

** Yountville's SWP entitlements continue at 1,100 acre-feet per year through 2035.

WATER DEMAND

In the 2001-2002 fiscal year, Yountville delivered approximately 168.8 million gallons (518 acre-feet) of potable water, resulting in an approximate daily average of 462,466 gallons. The Town's maximum day water demand was 733,000 gallons. Currently, the Town provides water service to approximately 714 connections. Of this amount, 32 connections are located outside of the Town near the intersection of Yountville Cross Road and the Silverado Trail.⁸

⁷ Operations at Rector WTP were forced to shut down between December 16, 2002 and January 13, 2003 due to high levels of turbidity caused by a winter storm.

⁸ In 1998, Yountville's Town Council adopted Ordinance No. 300-00, restricting water connections to single and multi-family residential projects on existing lots of record.

Yountville – 2001-2002 Water Demand	
Annual Water Demand:	168.8 million gallons
Average Daily Water Demand:	462,466 gallons
Maximum Day Water Demand:	733,000 million gallons *
Water Connections:	714
Population Served:	2,356 **

* Title 22 of the California Code of Regulations requires that sufficient water be available from the water sources and distribution reservoirs to adequately and dependably meet the requirements of all users under maximum demand conditions.

** Calculated in accordance with Title 22 of the California Code of Regulations, Government Code §64412.2

Projected water demands for Yountville were identified in the Town’s *Water Supply Plan (1998)*. The study identified existing and projected water demands for Yountville under two planning alternatives at buildout: expected development and maximum development.⁹ Demands were based on current and planned land uses defined in the Town’s General Plan and then calculated under three hydrological conditions: normal, below normal, and dry year.¹⁰

Yountville – Projected Water Demands (acre-feet)*			
Type	Normal Year	Below-Normal Year	Dry Year
Maximum Development	774	698	619

* Projected demands were modified to reflect a 30 acre-feet reduction in demand due to the implementation of a water conservation program (in accordance with its water supply contract with Napa County Flood Control and Water Conservation District). In addition, analysis assumed adoption of a conservation program to reduce demand 10% and 20% during below normal and dry years (this conservation program was subsequently adopted by the Town Council).

WATER TREATMENT FACILITIES

Yountville does not own, lease, maintain, or operate water treatment facilities. Water delivered to the Town is treated by the City of Napa and the State of California’s Veterans Home prior to entering the Town’s distribution system.

⁹ Buildout is anticipated for 2020.

¹⁰ Hydrologic conditions in the study were defined in percentages as to reliability levels of supply delivery: normal year, 60%; below year, 90%; and dry year, 95%.

DISTRIBUTION AND STORAGE FACILITIES

Yountville's distribution system receives and delivers potable water generated from the supply of the State of California's Veterans Home and the City of Napa. The Town's distribution system is gravity fed and underlays a single pressure zone. Since Yountville operates without treated water storage facilities, the distribution system is continually taking water from its interconnections with the Veterans Home or Napa. Potable water drawn from the Veterans Home is delivered through three separate interconnections with the State's distribution system. These connections are located near the intersections of Yountville Cross Road and Silverado Trail, Yountville Cross Road and Finnell Road, and California Drive and Washington Street. Potable water drawn from Napa is delivered through three interconnections with the City's 36-inch Conn Line, which underlays State Highway 29 in Yountville. These interconnections are located near the intersections of California Drive and Washington Street, Mulberry Street and Washington Street, and Webber Street and Washington Street.

RATE SCHEDULE

Yountville's water customers are charged two bimonthly fees for water service: a tiered usage charge and a fixed service charge. The usage charge is divided between inside and outside town customers as well as customer class. The usage charge is based on the amount of water delivered and is measured in quantities of 1,000 gallon units. The service charge is also divided between inside and outside town customers and is based on meter size. In addition, the Town collects a connection fee for initiating water service. Connection fees are divided between residential and non-residential customer classes. Residential customers are charged a flat fee while non-residential customers are charged a rate based on the estimated potential water demand for their meter type in relation to the average water use of a single-family residence. For example, a commercial structure with a 3-inch meter will pay a connection fee of \$17,680 (10.67 x \$1,657).

Yountville – Rate Schedule	
Inside Usage Fees	
Single-Family Residential:	\$1.26 for 1 to 5 units \$1.88 for 6 to 42 units \$2.26 for 43 to 100 units \$3.39 for 101 units and above
Multi-Family Residential: (per dwelling unit)	\$1.26 for 1 to 2 units \$1.88 for 3 to 14 units \$2.26 for 15 to 33 units \$3.39 for 33 units and above
Commercial:	\$1.75 for all usage
Industrial:	\$2.03 for 1 to 100 units

	\$4.04 for 101 units and above
Outside Usage Fees Residential: Industrial:	\$2.52 for 1 to 5 units \$3.76 for 6 to 42 units \$5.65 for 43 to 100 units \$8.46 for 101 units and above \$4.04 for 1 to 100 units \$8.09 for 101 units and above
Inside Service Fees .75-inch: 1-inch: 1.5-inch: 2-inch: 3-inch: 4-inch: 6-inch: 8-inch:	\$16.99 \$26.05 \$52.52 \$78.50 \$164.42 \$255.90 \$509.88 \$814.80
Outside Service Fees .75-inch: 1-inch: 1.5-inch: 2-inch: 3-inch: 4-inch: 6-inch: 8-inch:	\$33.98 \$54.40 \$105.02 \$161.15 \$328.83 \$511.78 \$1,019.75 \$1,629.60
Water Connection Fees Single-Family Residential: Multi-Family Residential: Other – .75-inch: Other – 1-inch: Other – 1.5-inch: Other – 2-inch: Other – 3-inch: Other – 4-inch: Other – 6-inch: Other – 8-inch:	\$1,657 \$1,160 (each dwelling unit) 1.00 1.67 3.33 5.33 10.67 16.67 33.33 53.33

Note: one unit equals 1,000 gallons.

FINANCIAL

Yountville's Water Enterprise Fund has an approved operating budget for 2002-2003 of \$527,280. Primary expenses include water purchases¹¹, employee payroll, and capital improvements. The Town's anticipated revenue for 2002-2003 is \$454,085¹². Revenue sources include residential and commercial water sales. As of June 2002, the Town's Water Enterprise Fund's capital reserve balance was \$222,647.

WRITTEN DETERMINATIONS

In anticipation of reviewing and updating Yountville's sphere of influence, and based on the above-mentioned information, the following written determinations are intended to fulfill the requirements of Government Code §56430. When warranted, some determinations include supplemental information listed in italics to provide context to the underlying service factor. A review of Yountville's sphere of influence will be included as part of a future study.

Infrastructure Needs or Deficiencies:

1. Through its contractual agreements, the Town of Yountville imports an adequate supply of water to meet existing and future system demands under normal conditions within the timeframe of this study.
2. The Town of Yountville should continue to pursue opportunities to increase its available water supply and continue to expand its water conservation efforts. These actions will help to ensure an adequate water supply during periods of below normal and dry year conditions.
3. The Town of Yountville's water supply is dependent on contracted entitlements with the Napa County Flood Control and Water Conservation District and the State of California's Department of Veterans Affairs. These contractual entitlements are essential to Yountville's ability to deliver potable water to its customers.
4. To account for the realities of water entitlements, the Town of Yountville should continue to objectively differentiate between entitlements and actual deliveries in their water supply analysis. This is especially important to ensure an adequate supply of water during extended drought periods when deliveries are restricted.

¹¹ Yountville currently is charged \$385 per acre-foot of potable water purchased from the Veterans Home and \$459 per acre-foot for potable water purchased from the City of Napa.

¹² Yountville anticipates subsidizing its Water Enterprise fund in 2002-2003 by transferring \$175,000 from the Town's General Fund.

5. In 2003, the Department of Water Resources issued the *State Water Project Delivery Reliability Report*. The report provides an assessment of SWP deliveries using historical precipitation rates along with projected land and water use demands through 2021, including delivery estimates during drought periods. This report is a valuable tool for all SWP contractors and should be incorporated into Yountville's water supply planning efforts.
6. The Town of Yountville has made reasonable efforts to secure additional water supplies to meet existing and projected water demands within its service area. This demonstrates a continued effort by Yountville to address system needs and deficiencies in a timely manner.

Recent examples include Yountville's 2000 water supply agreement with the City of American Canyon and its participation in Napa County Flood Control and Water Conservation District's 2000 water transfer agreement with the Kern County Water Agency. In addition, Yountville maintains a 1991 emergency water supply agreement with Domaine Chandon to access the winery's groundwater supply during a declared water shortage.

7. The Town of Yountville's water supply agreement with the State of California's Department of Veterans Affairs for annual entitlements drawn from Rector Reservoir is due to expire on October 1, 2003. The execution of a long-term water entitlement agreement with the Department of Veterans Affairs is essential to Yountville's ability to properly plan for projected water demands.

Negotiations for a long-term water supply agreement are pending the results of a capacity study being conducted by the Department of Veterans Affairs. The study was prompted by a determination by the Department of Fish and Game that releases from Rector Dam must be sufficient to meet the needs of downstream fish populations.

8. The Town of Yountville currently has a moratorium on new water connections and the expansion of existing water connections except for single-family and multi-family (two-unit) projects on lots of existing records. This moratorium is scheduled to remain in effect until concerns involving the long-term reliability of its contracted water supply at Rector Reservoir and capacity restrictions involving the North Bay Aqueduct are addressed. To satisfy these concerns in a timely manner, Yountville should continue to work closely with the State of California's Department of Veteran Affairs, Napa County Flood Control and Water Conservation District, and the City of Napa.
9. The Town of Yountville does not own or operate its own water treatment facility. Yountville must rely on the treatment facilities of the State of California's Department of Veterans Affairs and the City of Napa to provide treatment for its contracted water supply. Yountville should continue to work closely with these

agencies with respect to operational constraints to ensure the timely availability of potable water supplies.

10. The Town of Yountville does not have a treated water storage facility. Yountville must rely on treated storage supplies from the City of Napa and the State of California's Department of Veterans Affairs during peak system demand periods. Yountville should invest in its own treated water storage facility to ensure the availability of treated supplies during an emergency or interruption in service. The storage facility's capacity should be sufficient to meet Yountville's maximum day demand.

Yountville is currently studying the feasibility of developing a municipal storage system within a local aquifer. When available, surface flows would be stored in the affected aquifer and recovered through a municipal well during below normal and dry year conditions.

11. The Town of Yountville and the State of California's Department of Veterans Affairs jointly own and operate the Yountville/Veterans Home Joint Wastewater Treatment Facility. This plant provides advanced secondary treatment to wastewater for discharge and reclamation uses with Yountville's water service area. In order to offer the greatest range of reclamation uses within its service area, Yountville should explore opportunities aimed at expanding its reclamation program to include tertiary-level treatment.
12. Reclamation is a beneficial and efficient use of existing water resources and provides credence to the Town of Yountville's water conservation efforts.

Growth and Population Projections :

1. The Town of Yountville evaluates its water service capacities using reasonable demand projections detailed in its *Water Supply Plan (1998)*.

Yountville will be conducting an update to its Water Supply Plan in 2004.

2. The calculation formula codified in Title 22 of the California Code of Regulations, Government Code §64412.2, is an appropriate method in estimating the total population served by the Town of Yountville's water service system. The population served by Yountville's water system based on this calculation method is 2,356.

Financing Constraints and Opportunities:

1. The Town of Yountville currently has a moratorium on new water connections and the expansion of existing water connections except for single-family and multi-family (two-unit) projects on lots of existing records. Once this moratorium

is rescinded, Yountville should benefit from an increase in revenues generated from connection fees and additional usage charges.

2. The Town of Yountville's contracted water supply is subject to rate changes imposed by the supplier (exporter), resulting in potential increases in costs to the Town. Similarly, Yountville's ability to supplement its contracted water supply in dry years through water supply programs facilitated by the Department of Water Resources and/or open market purchases are also liable to increase costs. Typically, these increases in operation costs are passed on directly to the customer through rate increases. The extent of these costs and impact on the rates paid by customers, however, remain difficult to measure due to the uncertainty involving water markets.

Cost Avoidance Opportunities:

1. The Town of Yountville is a member of Napa County Flood Control and Water Conservation District's technical advisory committee, known as "Wartac." This group provides NCFCWCD with a consensus among the five cities and County as it relates to current and future water issues affecting Napa County. This advisory group provides Yountville the opportunity to share costs with other participating agencies on projects of mutual interest and facilitates the exchange of service information.
2. The Town of Yountville is a funding participant in Napa County Flood Control and Water Conservation District's "2050 Study." This study's objective is to identify current and projected water demands within each participating agency's service area as well as document agricultural demands in unincorporated areas served by groundwater. This study will also examine the feasibility of pursuing cooperative water supply projects aimed at meeting countywide demands through 2050. Yountville will benefit from the study and should continually explore collaborative opportunities aimed at identifying new and improved water supplies.

Opportunities for Rate Restructuring:

1. In 2002, the Town of Yountville's Town Council adopted a 5% increase to its water service rates. The rate increase was adopted to meet increased operational costs and to lessen the future demand for subsidies drawn from Yountville's General Fund, which are used to cover operating losses in its water enterprise fund. This practice enables Yountville to keep its water rates significantly lower than the rates offered by American Canyon, Calistoga, and Napa.
2. The Town of Yountville should consider increasing its water rates to be more reflective of the actual costs of providing water service. Currently, general fund monies subsidize water service operations. An increase in rates would also provide Yountville with additional revenue needed to finance improvements to its water system, including the development of a treated water storage facility.

Opportunities for Shared Facilities:

1. As a subcontractor to Napa County Flood Control and Water Conservation District, the Town of Yountville is responsible for assuming its proportional costs for the delivery of water drawn from the State Water Project. Subcontractors are also responsible for paying a transportation charge that covers the cost associated with the infrastructure and facilities needed to capture and convey water to Napa County. These shared facilities include the North Bay Aqueduct and the Napa Turnout Reservoir. Costs relating to future upgrades and improvements to this conveyance system will be shared among each subcontractor as well as the Solano County Water Agency and its subcontractors.

Improvements to the North Bay Aqueduct are needed to increase its available capacity to equal the amount of entitlements contracted by the Napa County Flood Control and Water Conservation District (NCFCWD). NCFCWD is currently working with the Solano County Water Agency to implement improvements to the North Bay Aqueduct to meet both agencies contracted entitlement amount. A key factor to this planned improvement is the completion of the original design of the North Bay Aqueduct and to satisfy the increase in State Water Project entitlements generated from NCFCWD's agreement with the Kern County Water Agency.

2. The Town of Yountville currently shares operating costs with the City of Napa to treat and deliver its allotment of water entitlements drawn from the State Water Project. Similarly, Yountville shares operating costs with the State of California's Department of Veterans Affairs for water entitlements drawn from Rector Reservoir and treated at Rector Water Treatment Plant. These relationships provide the mechanism for these agencies to share costs with one another with respect to future system improvements affecting each agency's water systems.

Government Structure Options:

1. The Town of Yountville is the only public agency providing water service within its jurisdictional boundary. There are two other public agencies empowered to provide water service whose jurisdictions overlap that of Yountville: the Napa County Flood Control and Water Conservation District and Napa County Resource Conservation District. Both of these agencies have elected not to offer water service, and have expressed no intentions of doing so in the foreseeable future.
2. There has not been a change in the Town of Yountville's organization since 1990 and its sphere of influence remains conterminous with its jurisdiction boundary.

3. The Town of Yountville has a moratorium on new and expansions of existing water connections except for single-family and multi-family (two-unit) projects on lots of existing records. Until this moratorium is rescinded, it is not anticipated that Yountville will pursue a change in its organization within the timeframe of this study.

Evaluation of Management Efficiencies:

1. Each year, the Town of Yountville provides a summary of past and projected revenues and expenditures stemming from its water service operations as part of its annual budget. The budget is adopted following publicly noticed budget study sessions in which members of the public are allowed to comment and offer suggestions with respect to expenditures relating to water service. In addition to enhancing the accountability of elected and appointed officials, the budget process provides a clear directive towards staff with respect to prioritizing city resources.
2. In 2002, the Town of Yountville adopted a five-year capital improvement program that includes 1.3 million dollars for projects aimed at upgrading and improving its water service operations. The capital improvement program was prepared by staff and demonstrates a reasonable effort on behalf of management to address and update water quality and service objectives in a timely and efficient manner.
3. The Town of Yountville does not have a public works director. Yountville's water service operations are managed by a public works supervisor who is appointed by the town administrator; sewage and reclamation operations are managed by an appointed wastewater treatment supervisor. Although this arrangement provides for reasonable management of Yountville's water service operations, future studies should include an evaluation of the impact this arrangement has on other public works operations.
4. The Town of Yountville has sufficient capital reserves to finance the cost of approved capital improvement projects to its water system.

Local Accountability and Governance:

1. The Town of Yountville Town Council meetings are conducted twice a month and are open to the public. Public inquiries involving water service operations can be addressed to the Council at this time. Regularly scheduled town meetings provide an opportunity for Yountville's constituents to ask questions of their elected representatives, while helping to ensure that service information is being effectively communicated to the public.

2. The Town of Yountville makes reasonable efforts to maintain public dialogue with its constituents regarding its water service operations. These efforts facilitate local accountability and contribute towards public involvement in local governance.

These efforts include quarterly newsletters, bill inserts, and conducting public workshops on water conservation opportunities. Customers can visit or call Yountville's administration office during regular business hours to discuss questions involving their water bill or speak with water operations personnel regarding service conditions. In addition, designated personnel are on call 24 hours a day to respond to water service related emergencies.

3. The Town of Yountville should enhance its public outreach efforts by establishing and maintaining a website that includes information relating to its water service operations. In addition to posting dates and agendas for council meetings, the website should contain information relating to water rates, conservation efforts, and recent water quality reports.
4. The Town of Yountville elects to subsidize its water enterprise operations with funds drawn from its General Fund. Although the subsidy allows Yountville to maintain low water rates, this practice does not reflect the actual costs of providing water service and is counterproductive towards conservation by not creating an incentive for high use customers.
5. The Town of Yountville has expressed interest in examining the feasibility of developing a storage system within a local aquifer to store excess surface flows. These stored reserves would then be recovered through the development of a municipal well during below normal and dry years. In the course of its evaluation, Yountville should provide an objective analysis of the potential impacts municipal withdrawals would have on the affected groundwater basin and its existing users.
6. The Town of Yountville's administration and water service operations are maintained and managed by a responsive and professional staff. These characteristics enhance accountability and cultivate desirable working relationships with members of the public as well as other agencies.